ATTACHMENT

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

New Claims 20 and 21 are added, as follow.

20. A method of transiently expressing a heterologous peptide, polypeptide or protein in a selected host cell, comprising;

(i) providing a suicide vector according to any one of claims 1 to 12;

(ii) transforming said host cell with said suicide expression vector;

(iii) culturing said transformed host cell under suitable conditions for the expression of the said heterologous peptide, polypeptide or protein, and

(iv) thereafter inducing expression of the restriction enzyme or functional portion thereof to bring about cleavage and subsequent degradation of the said suicide expression vector to thereby remove recombinant vector DNA from the host cell and halt further expression of the said heterologous peptide, polypeptide or protein.

21. A suicide expression vector for transiently expressing a heterologous peptide, polypeptide or protein in a selected host cell, said vector comprising;

(i) a first nucleotide sequence encoding said heterologous peptide, polypeptide or protein operably linked to a first promoter sequence,

(ii) a second nucleotide sequence encoding a restriction enzyme or functional portion thereof operably linked to a second promoter sequence, said second promoter sequence being inducible, and

(iii) one or more cleavage site(s) for said restriction enzyme or functional portion thereof, said cleavage site(s) being absent from the chromosomal DNA of said host cell, wherein upon introduction of the vector into said host cell, induced expression of the restriction enzyme or functional portion thereof from said second nucleotide sequence brings about the cleavage and subsequent degradation of the suicide expression vector to thereby remove recombinant vector DNA from the host cell and holt further expression of the said heterologous peptide, polypeptide or protein.

Claims 1, 6, 8-10, 15 and 17 have been amended, as follow.

1. (Amended) A suicide expression vector for transiently expressing a heterologous peptide, polypeptide or protein in a selected host cell, said vector comprising;

(i) a first nucleotide sequence encoding said heterologous peptide, polypeptide or protein operably linked to a first promoter sequence,

(ii) a second nucleotide sequence encoding a restriction enzyme or functional portion thereof operably linked to a second promoter sequence, said second promoter sequence being inducible, and

(iii) one or more cleavage site(s) for said restriction enzyme or functional portion thereof, said cleavage site(s) being absent from the chromosomal DNA of said host cell, wherein upon introduction of the vector into said host cell, induced expression of the restriction enzyme or functional portion thereof from said second nucleotide sequence brings about the cleavage and subsequent degradation of the suicide expression vector.

6. (Twice Amended) The vector according to[any one of the preceding] claim[s] 1, wherein the second nucleotide sequence encodes a restriction enzyme or functional portion thereof that recognizes a cleavage site(s) of ten or more nucleotides.

8. (Twice Amended) The vector according to[any one of the preceding] claim[s] 1, wherein the one or more cleavage site(s) is/are located at a site(s) on the vector which avoids steric hindrance of binding by said restriction enzyme or functional portion thereof.

9. (Twice Amended) The vector according to[any one of the preceding] claim[s] 1, further comprising a third nucleotide sequence encoding a ribozyme targeted against mRNA produced from the said second nucleotide sequence encoding the restriction enzyme or functional portion thereof.

10. (Twice Amended) The vector according to[any one of the preceding] claim[s] 1, wherein the second promoter is selected from the group consisting of the placZ promoter, the placUV5 promoter and the T7 RNA polymerase promoter.

15. (Amended) A method of transiently expressing a heterologous peptide, polypeptide or protein in a selected host cell, comprising;

(i) providing a suicide vector according to any one of claims 1 to 12;

(ii) transforming said host cell with [a]said suicide expression vector[according to any one of claims 1 to 12,];

(iii) culturing said transformed host cell under suitable conditions for the expression of the said heterologous peptide, polypeptide or protein, and

([ii]iv) thereafter inducing expression of the restriction enzyme or functional portion thereof to bring about cleavage and subsequent degradation of the said suicide expression vector, thereby transiently expressing said heterologous peptide, polypeptide or protein.

17. (Amended) A method for the production of a microorganism vector which contains recombinant peptide, polypeptide or protein but no recombinant DNA, comprising;

(i) providing a suicide expression vector according to any one of claims 1 to 12;

(ii) transforming said microorganism with [a]said suicide expression vector[according to any one of claims 1 to 12,];

(iii) culturing said transformed microorganism under suitable conditions for the expression of the said heterologous peptide, polypeptide or protein, and

([ii]iv) thereafter inducing expression of the restriction enzyme or functional portion thereof to bring about cleavage and subsequent degradation of the said suicide expression vector, thereby producing said microorganism vector free from recombinant DNA.

19. (Amended) A microorganism vector produced by the method according to claim 17[or 18].